Claims

1. Method for transmitting a sequence of data in a radio communication system, in which
- a first transmitting station(S1) generates a transmission signal (C(t)) for transmitting the sequence of data to a first receiving station (R1) via a radio interface (V),
- before the transmission the radio interface with respect to an interference signal (I(t)) of an interference source (S2) is checked by at least the first transmitting station (S1) and/or the first receiving station (R1),
characterized in that
- an approach of the interference source (S2) relative to the first receiving station (R1) is detected, and
- the transmission only begins at a moment in time (T0) if in a length of time (Δt) which is necessary to transmit the sequence of data, an approach of the interference source (S2) to the first receiving station (R1) is only possible to an extent (Δ) that the interference signal (I(t)) does not interfere with the transmission.

2. Method according to Claim 1, in which
an expected change, in particular increase in the intensity of the interference signal ($\Delta I = I_1 - I_0$) is determined or estimated at the first receiving station (R1) using the actual and/or maximum possible relative velocity ($\Delta v = v_{S1} + v_{R1}$; $\Delta v = v_{S2max} + v_{R1}$) of the interference source (S2) and the first receiving station (R1) to each other.

3. Method according to Claim 1 or 2, in which
an expected change, in particular decrease in the intensity of the interference signal (ΔC = C11- C0)) is determined or estimated at the first receiving station (R1) as a function of the actual and/or maximum possible relative velocity ($\Delta vc = v_{S1} + v_{R1}$) of the first transmitting station (S1) and of the first receiving station (R1)

to each other.

4. Method according to Claim 2, or 3, in which for the stations (S1, R1, S3, R3) and interference sources (S2) within a detection area (r_R) of the first receiving station (R1) the respective determinable and transmitted velocities (v_{S1}, v_{R1}, v_{S2}) of said stations and sources are used, whereby a usual interference source (S2) within the detection area (r_R) can be located as an interference source especially by the first receiving station (R1).

5. Method according to one of the Claims 2 to 4, in which
- a usually maximum possible or maximal sensible velocity (v_{S2max}) is used for
- the stations (S1, R1, S3, R3) and interference sources (S2) within a detection area (r_R) of the first receiving station (R1) without any such related velocity information and/or
- the stations (S1, R1, S3, R3) and interference sources (S2) outside a detection area (r_R) of the first receiving station (R1) without any such related velocity information.

6. Method according to one of the Claims 2 to 5, in which with the expected change in the intensity of the interference signal (ΔI) and/or the expected change in the intensity of the transmission signals (ΔC), the maximum available duration (Δt) for the interference free transmission of the sequence of data is determined.

7. Method according to one of the preceding claims, in which a threshold value (ΔC (t) -I(t)) for a minimum required difference of the intensity of the transmission signal (C(t)) to the intensity of the interference signal (I(t)) is determined and/or estimated as the measurement for a signal (I(t)) that does not interfere with the transmission signal (C(t)).

8. Method according to one of the preceding claims, in which a decoding area(r_D) is set around the first receiving station (R1), whereby the interference signal (I1) of the interference source (S2) which is inside the decoding area (r_D) causes unacceptable interference.

9. Method according to one of the preceding claims, in which parameters (v_{S1}, v_{R1}, I_0, C_0) relating to the station and/or determined in the station and/or parameters relating to transmission conditions, in particular a threshold value (Δ) and/or a maximum possible transmission duration (Δt), are exchanged between the first receiving station (R1) and the first transmitting station (S2).

10. Transmit and/or receive station (S1, R1) of a radio communication system with mobile transmit and/or receive stations (S1, R1) and/or mobile interference sources (S2), in particular a second transmitting station (S2) as a mobile interference source, with

- a velocity determining device (VD) for determining velocities and/or relative velocities of the stations and/or interference source to each other,
- a device for determining carrier status, in particular carrier scanning device (CS) for determining or identifying an interference free carrier for the intended transmission of a sequence of data, and
- a threshold determining device (IA) for determining a threshold value (Δ) for a minimum difference between a desired receive signal (C(t)) and an interference signal (I(t)), and/or
- a device for setting transmission duration (BA) for pre-setting a maximum possible transmission duration (Δt) for transmitting a sequence of data.